

ABSTRACT

A process for extraction of nanoparticles into aqueous phase by complexation with water soluble surfactants such as cetyltrimethyl ammonium bromide (CTAB), sodium dodecyl sulfate (SDS) etc., wherein a bi-phasic mixture is prepared in which, hydrophobized nanoparticles are in organic medium, and surfactant molecules are in aqueous phase. An emulsion is formed on vigorous shaking of the bi-phasic mixture, and after phase separation metal nanoparticles transfer to aqueous medium.